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| 09/763,631      | 06/11/2001  | Nail Kavak           | 203520US2PCT        | 3849             |

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| EXAMINER |
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FERRIS, DERRICK W

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| ART UNIT | PAPER NUMBER |
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2663

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/763,631

Applicant(s)

KAVAK, NAIL

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-20 and 36 is/are allowed.
- 6) ☒ Claim(s) 2,21-27,29,31,33-35 and 37 is/are rejected.
- 7) ☒ Claim(s) 28,30 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/2005 has been entered.

### *Response to Arguments*

2. This Office action is in response to applicant's paper filed 11/18/2005. **Claims 1-37** as amended are still in consideration for this application. Applicant has amended claims 2, 21, and 37. Applicant has canceled no claims. Applicant has added no claims.

3. Examiner does **not withdraw** the obviousness rejection to *Grosslauser I* in view of *Grosslauser II*. The examiner thanks applicant for attempting to clarify applicant's invention over the cited prior art. However, upon careful consideration, the examiner notes that the amended limitation still reads on the applied prior art. At issue is the newly added limitation of an endpoint in a multi-casting group of endpoints that receives an address of a core from one of a plurality of MNS servers *based on a message passed between at least two of the MNS servers*. *Grosslauser I* teaches that the core propagates its address to all the intermediate switches (e.g., MNS servers), see e.g., column 8, lines 17-33. The above limitation reads on the references as follows: in propagating the message to the intermediate switches, it is perceivable that the message is passed between at least two intermediate servers in order to reach a more distant intermediate server. Thus the above limitation is met by the reference. Evidence for the above

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statement is drawn e.g., from figures 1 and 4 where figure 4 shows that switch 1 receives the core message from switch 2.

Although the same prior art is applied, the following rejection is made non-final since applicant paid for a continued examination. The examiner would like to also point out that the reason stated for applicant's proposed amendment (i.e., supplying an address of a nearest located other MNS server if the local MNS server has no unused address as recited in allowable claim 1 and in the top of page 12 of applicant's remarks filed 11/18/2005) is not recited in the above claims at issue.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 2, 21-27, 29, 31, 33-35, and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,353,596 B1 to *Grossglauser et al.* ("*Grossglauser I*") in view of "SEAM: Scalable and Efficient ATM Multicast" to *Grossglauser et al.* ("*Grossglauser II*").

As such to **claim 2**, *Grossglauser I* discloses a plurality of nodes as shown in figure 4 where the plurality of endpoints act as data senders or receivers, see e.g., column 11, lines 52-65. These nodes are linked by ATM, see e.g., column 6, lines 47-54. The network is further adapted to support multipoint-to-multipoint multicasting between a group of endpoints, see e.g., column 3, lines 16-23, where the network includes means for

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building a single spanning delivery tree between at least one sender and all receivers, see e.g., column 15, lines 1-15, belonging to a multi-casting group of endpoints, and in that only one VC is employed to transmit data over said single spanning tree, see e.g., column 7, lines 15-25.

*Grossglauser I* may be silent or deficient to the further limitation of IP with respect to IP/ATM.

*Grossglauser II* teaches the further recited limitation above at e.g., right-hand column on page 868.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Grossglauser I* by clarifying that the ATM traffic as taught by *Grossglauser II* contains IP at layer 3.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to interface with the Internet and e.g., using ATM LANE. In particular, *Grossglauser II* cures the above-cited deficiency by providing a motivation found at e.g., right-hand column on page 868. Second, there would be a reasonable expectation of success both references teach SEAM. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 21**, see similar rejection to claim 2.

As to **claim 22**, *Grossglauser I* teaches using a modified CBT tree that teaching a CBT rooted in a core node, see e.g., column 11, lines 15-40.

As to **claim 23**, with respect to selecting a core node, see e.g., column 11, lines 15-40 of *Grossglauser I*.

As to **claim 24**, *Grossglauser I* teaches forwarding traffic based on the defined routing protocol thus forwarding the traffic to only those branches in the tree where traffic is required, see e.g., column 11, lines 52-65.

As to **claim 25**, *Grossglauser I* teaches forwarding leaf initiated joins at e.g., column 15, lines 1-14.

As to **claim 26**, *Grossglauser II* teaches providing ATM addresses for the core for said MNS, when given an IP multicast address at e.g., right-hand column on page 868. Examiner notes the same motivation applies for the secondary reference.

As to **claim 27**, *Grossglauser I* teaches replicating packets only on branches of said spanning tree when needed based on the applied routing algorithm at e.g., column 11, lines 52-65. See also column 15, lines 60-67 with respect to copy of packets.

As to **claim 29**, *Grossglauser I* teaches dynamically selecting core nodes such that the tables are created at run time at e.g., column 11, lines 15-37.

As to **claim 31**, *Grossglauser I* teaches dynamically selecting core nodes such that the core is selected based on queries at e.g., column 11, lines 15-37.

As to **claim 33**, *Grossglauser I* teaches forwarding leaf initiated joins at e.g., column 15, lines 1-14.

As to **claim 34**, *Grossglauser I* teaches forwarding leaf initiated joins which are used to select the core node at e.g., column 15, lines 1-14.

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As to **claim 35**, *Grossglauser I* teaches generating a dummy EOP cell after a time-out which is an "I am alive" message, see e.g., column 11, lines 1-15.

As to **claim 37**, see similar rejection to claim 2.

***Allowable Subject Matter***

2. **Claims 1, 3-20, and 36** are allowable.
3. **Claims 28, 30, and 32** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris

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DWF

Examiner  
Art Unit 2663

 1/9/06  
**DERRICK FERRIS**  
**PATENT EXAMINER**